

Unit 1 What is Money?

04/05/16

1.1 Money Defined

What is money?

a piece of paper that controls our world, trees, cloth, a method of corruption, green, everything, the only way to obtain things, not something to care about, something that holds value

"Avarice is the root of all evil"

Any article or substance used as a medium of exchange, measure of wealth, or means of payment

1.1 Money Defined

04/05/16

IWBAT

- Explain what money is
- Describe the different forms it can take.

Via

- Capturing notes on my graphic organizer/note frame
- Whole class discussions to introduce and clarify key concepts
- Completing practice problems collaboratively with teacher support

1.1 Money Defined

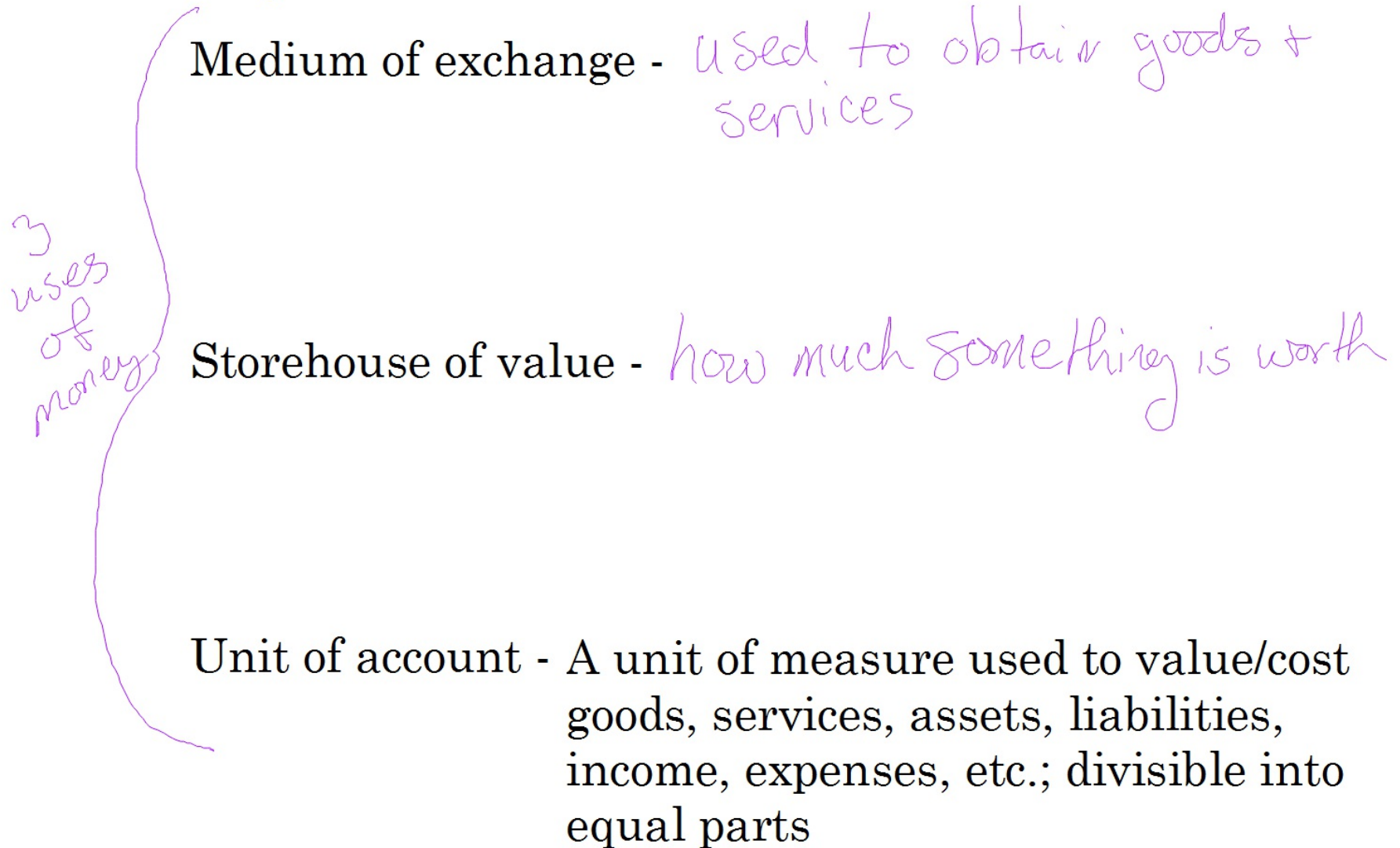
Economy - the sum of all goods and services of a region

Money - anything exchanged for goods or services

Bartering - direct trading of goods or services for other goods or services

IWBAT explain what money is and describe the different forms it can take.

1.1 Money Defined



IWBAT explain what money is and describe the different forms it can take.

1.1 Money Defined

Commodity money - money backed by physical items with intrinsic value (eg. gold)
US Dollar from Civil War - 1971

Fiat money - money backed by the faith of the people
US Dollar since 1971

IWBAT explain what money is and describe the different forms it can take.

1.1 Money Defined

Digital money - money in your accounts, not physical cash

Currency - the money used by a country or region,
e.g. dollars & pesos

IWBAT explain what money is and describe the different forms it can take.

1.1 Money Defined

Vocabulary: Appendix A.3 Key Terms

Practice: 1.1.2 #2-9

Exit Ticket: What are the three uses of money?

IWBAT explain what money is and describe the different forms it can take.

1.2 How Money is Created

04/06/16

What are the three uses of money and how do they differ?

medium of exchange - exchange money for goods + services

storehouse of value - how much something is worth

unit of account - unit of measure divisible into equal parts

1.2 How Money is Created

Let's review yesterday's Practice Problems.

5) \$223.80

$$\begin{array}{r} 2 \times 50 \quad 100 \\ 3 \times 20 \quad 60 \\ 13 \times 5 \quad 65 \\ \hline \quad \quad 225 \\ \$225.00 \\ - 223.80 \\ \hline \$1.20 \end{array}$$

- 10) • Trade may be unfair
(no change for an elephant)
- Stuff could be fake or counterfeit
 - Trade goods may be difficult to transport
 - Have nothing to trade

1.2 How Money is Created

04/06/16

Why don't they just print more money?

IWBAT

- Learn how money is created.
- Understand the role of Treasury bonds and the Federal Reserve.
- Understand the concept of fractional-reserve banking.

Via

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1.2 How Money is Created

bank - an institution licensed as a receiver of deposits

securities - investments

Federal Reserve Bank - the national bank for the USA, where Congress goes for money

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

Federal Reserve Bank

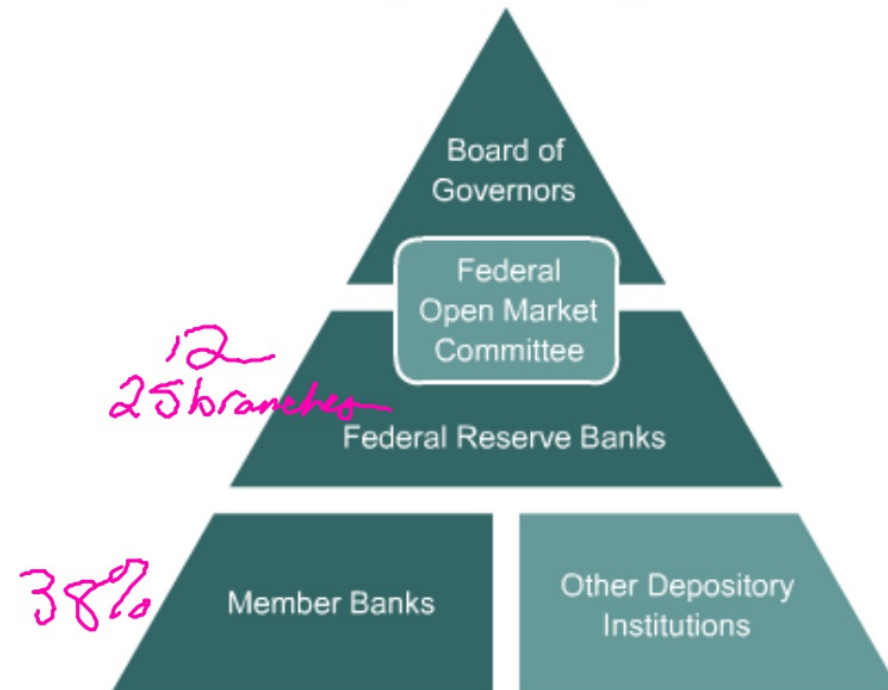
Chairman of the Board of Governors (Fed Chair)

Last three:

Alan Greenspan (8/1987-1/2006)

Ben Bernanke (2/2006-2/2014)

Janet Yellen (2/2014-)



IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

According to the Federal Reserve, a few of the many benefits of a sound monetary policy are:

- It promotes stable economic growth.
- It ensures that employment levels are not too low.
- It helps keep prices stable.

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

The three main tools that the Federal Reserve uses to enact monetary policy are:

- **open market regulation** — The purchase and sale of U.S. Treasury and federal-agency securities such as Treasury bonds.
- **discount rate** — The interest rate charged to commercial banks on loans they receive from the Federal Reserve.
- **reserve rate** — The amount of funds that a bank must hold in reserve. The rate is given as a percentage of the total deposits.

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

bond - a promise by an institution to pay an investor the full amount borrowed plus periodic interest

US Treasury bond -

- 1) Congress asks for money from UST
- 2) UST issues a bond (bonds)
- 3) UST sells the bonds to banks (often foreign)
- 4) UST has money & gives it to Congress
- 5) populace pays bonds back

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

How does the Fed buying & selling bonds affect you?

Buy from a bank, banks receive money, give more loans, lower interest rates

Sell to banks, banks have less money, interest rates increase

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

Fractional Reserve Banking

reserve rate

Liability Type	Requirement	
	% of liabilities	Effective date
Net transaction accounts ¹		
\$0 to \$14.5 million ²	0	1-22-15
More than \$14.5 million to \$103.6 million ³	3	1-22-15
More than \$103.6 million	10	1-22-15
Nonpersonal time deposits	0	12-27-90
Eurocurrency liabilities	0	12-27-90

<http://www.federalreserve.gov/monetarypolicy/reservereq.htm>

Nonpersonal time deposit - A deposit account that is held by a depositor such as corporations, foreign banks, and bank corporate customers other than individuals; an example is a money market. This account pays a fixed amount for a period of time and it requires advance notice before money can be withdrawn from it. Advance notice has to be issued in order not to incur an early withdrawal penalty. (investorwords.com)

eurocurrency liabilities

<http://definitions.uslegal.com/e/eurocurrency-liabilities/>

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

Fractional Reserve Banking

- Read: "How Banks Make Money"
- Discuss with a partner what you understand and about what you still have questions
- Create with your partner a statement explaining what you understand about fractional reserve banking.
- Be prepared to share with the class.
- Listen to other students' statements for answers to your questions.
- Ask any unanswered questions.

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

Assume the reserve rate is 10%, that a bank receives a deposit of \$650, and that all transactions take place at the same bank. How much of that original \$650 can a bank loan out? How many loans can the bank make from that one deposit?

$$\begin{array}{r} \$585 \\ \$650 \times .10 = 65 \\ - 65 \\ \hline \$585 \end{array}$$

Home screen
recursion

650 enter

*.9 enter

enter

:

24 times to get to \$50

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

Assume the reserve rate is 10%, that a bank receives a deposit of \$1200, and that all transactions take place at the same bank. How much of that original \$1200 can a bank loan out? How many total dollars can the bank loan from this original investment?

\$1080

$$\frac{\$1200}{0.9^2} \approx \$10,000$$

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.2 How Money is Created

Why don't they just print more money?

Write a paragraph explaining why the Federal Reserve Bank is a *good* thing or a *bad* thing. You must pick one point of view and defend it with what you already know.
(15 min individual assignment)

Vocabulary: Appendix A.3 Key Terms

Exit Ticket: What is a treasury bond and why are they needed?

IWBAT learn how money is created, understand the role of Treasury bonds and the Federal Reserve, and understand the concept of fractional-reserve banking.

1.3 Inflation & Recession

04/12/16

Why doesn't the Federal Reserve Bank just print more money?

- Printing too much devalues the currency
- Banks can create digital money w/o needing more cash

1.3 Inflation & Recession

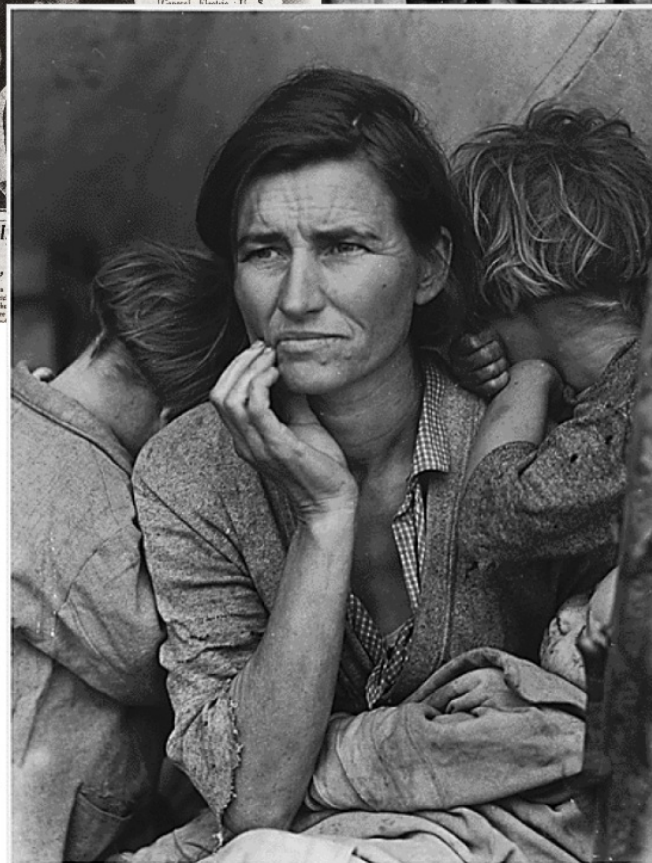
What are inflation, deflation, and recession?

inflation - economy making a lot of money,
low unemployment, better profits, demand
increases so suppliers work more or prices
increase

deflation - economy isn't making enough money,
unemployment increases, profits smaller or none,
demand decreases, supply decreases or
prices decrease

recession - money's gone, stocks worth less
unemployment is up (deflationary period)

1.3 Inflation & Recession



IWBAT

- discuss inflation, deflation, and recession
- learn how deflation can be used to define depressions and recessions.

Via

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1.3 Inflation & Recession

Purchasing power - the ability to use money
to buy goods and services

Inflation - purchasing power decreases
wages increase, prices increase, profits increase



Deflation - purchasing power increases
prices decrease, wages decrease, profits decrease,
layoffs, businesses close

IWBAT discuss inflation, deflation, and recession.

1.3 Inflation & Recession

Federal Reserve Bank - Chief bank of the USA, provides money to banks (via loans), secure money, help control the economy via interest rates

Consumer Price Index (CPI) - Compares living costs in a city to the average for the whole country

Fluctuation -  **unpredictable**
 **Desired**

IWBAT discuss inflation, deflation, and recession.

1.3 Inflation & Recession

Recession - Deflation continues for 6 months or longer
prices decrease, wages decrease, most things decrease,
purchasing power increases, job loss, home foreclosures

Great Recession unemployment

Dec. 2007: 5.0%, Oct. 2009: 10.0%, Dec. 2013: 6.6%

GDP -4.3%

Depression - Like a recession, only worse (go on for years)

Great Depression unemployment

1929: 3.2%, 1933: 24.9%, 1939: 17.2%

GDP -26.7%

IWBAT discuss inflation, deflation, and recession.

1.3 Inflation & Recession

The Great Depression:
(US) October 29, 1929 - December 1941

Change in economic indicators 1929–32^[17]

	United States	Great Britain	France	Germany
Industrial production	–46%	–23%	–24%	–41%
Wholesale prices	–32%	–33%	–34%	–29%
Foreign trade	–70%	–60%	–54%	–61%
Unemployment	+607%	+129%	+214%	+232%

Recent US Recessions:

- July 1981 – November 1982: 14 months
- July 1990 – March 1991: 8 months
- March 2001 – November 2001: 8 months
- December 2007 – June 2009: 19 months

IWBAT discuss inflation, deflation, and recession.

1.3 Inflation & Recession

Vocabulary: Appendix A.3 Key Terms

Practice: 1.3.2

Quiz 2.6.2

IWBAT discuss inflation, deflation, and recession.

1.4 National and Global Debt

04/13/16

In your own words, explain who would benefit from inflation and who would benefit from deflation.

inflation - businesses, people already working, people w/out jobs (more available), overall economy will improve, banks & treasury, spenders, pawnshop, thrift shops

deflation - people who need lower prices, savers, loan officers, pawnshop



1.4 National and Global Debt

Scientific Notation

$$n.nn \times 10^p$$

Sixteen point one trillion dollars

$$\$16.1 \times 10^{12} \quad \$1.61 \times 10^{13}$$

$$\$16,100,000,000,000.$$

\$294,443 million

$$\$2.94 \times 10^{11}$$

$$294,443,000,000$$

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

IWBAT

- discuss debt, deficit, GDP, debt ratio,
- use scientific notation to represent large numbers.

Via

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1.4 National and Global Debt

Debt vs. Deficit

Public Debt & Intragovernmental Debt

Intragovernmental debt includes items like Medicaid, Social Security, and monies borrowed from one department to pay another department.

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

Liabilities and Assets

Liability – a responsibility for debt (you owe money)

Assets – things you own that are valuable which can be used to cover a debt (gold, diamonds, house, car, electronics) property

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

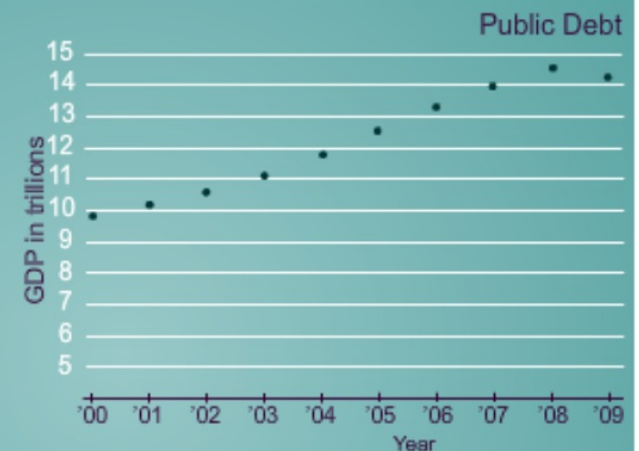
1.4 National and Global Debt

Gross Domestic Product (GDP)

Category	Description
Consumer Purchase	All goods and services purchased, such as gasoline
Investment	Business and residential investments, such as machinery or houses
Government Spending	All spending on education, defense, employee salaries, etc.
<u>Net Exports</u>	Exports sold abroad minus imports purchased domestically

Here is the approximate GDP for the United States from 2000 to 2009.

Year	GDP
2000	9,951,500,000,000
2001	10,286,100,000,000
2002	10,642,300,000,000
2003	11,142,100,000,000
2004	11,867,800,000,000
2005	12,638,400,000,000
2006	13,398,900,000,000
2007	14,077,600,000,000
2008	14,441,400,000,000
2009	14,240,200,000,000



IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

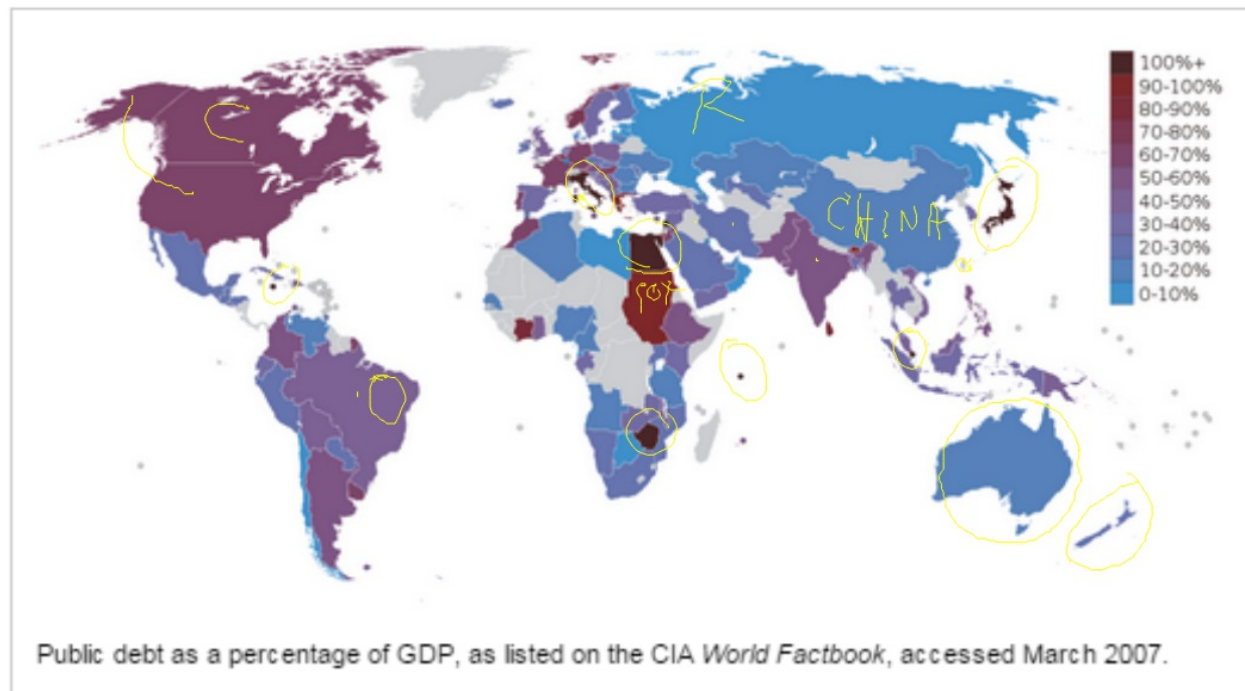
Debt to GDP ratio	2007	2008	2009
$\frac{\text{debt}}{\text{GDP}}$	$\frac{14.0t}{14.1t}$	$\frac{14.5t}{14.4t}$	$\frac{14.1t}{14.2t}$
	99.29%	100.69%	99.29%

This is done to make comparisons between countries' spending easier by putting small economies on the same scale as large economies.

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

Global Debt



<https://www.cia.gov/library/publications/the-world-factbook/>

Who holds our debt?

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

Vocabulary: Appendix A.3 Key Terms

Practice: 1.4.2

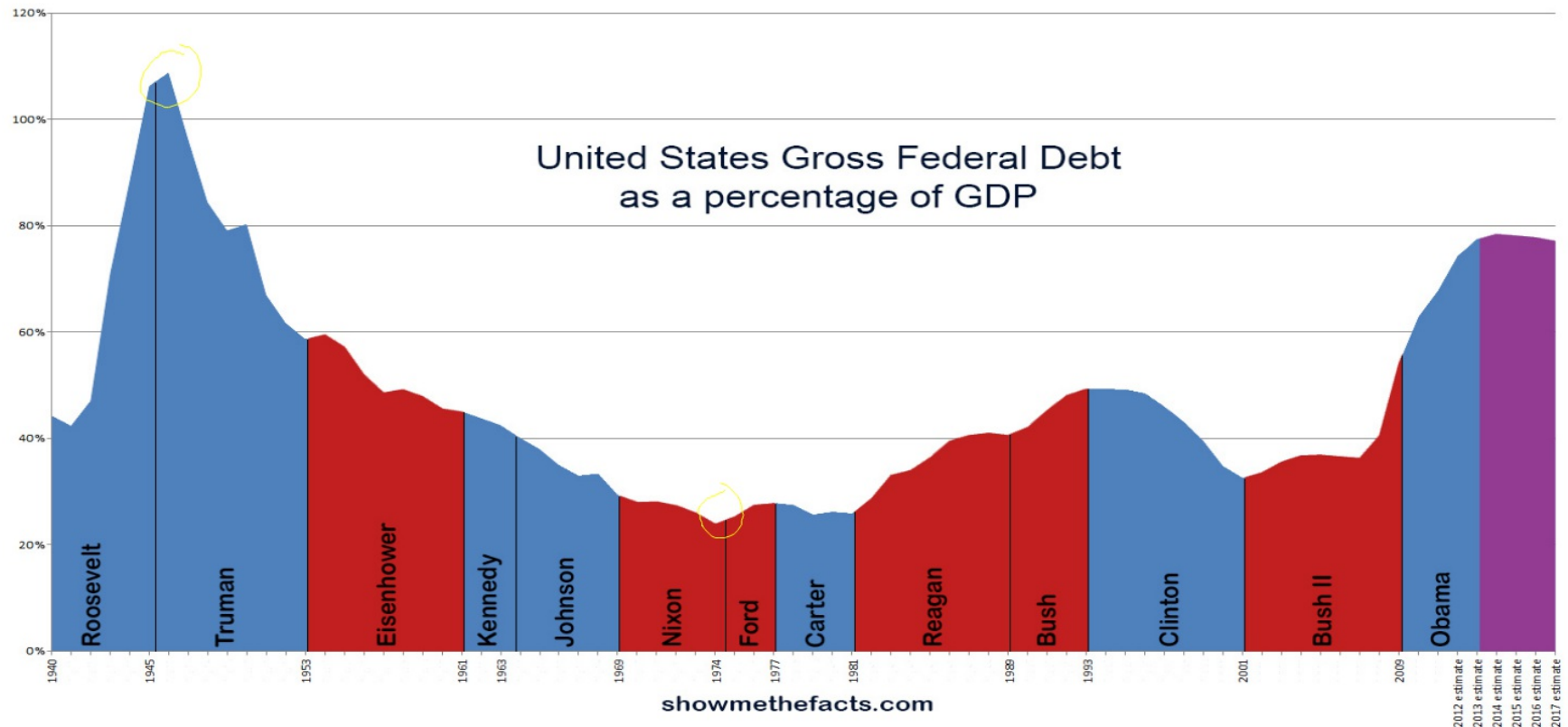
If a country's debt-to-GDP ratio is currently 50% and its debt is expected to grow from \$10 trillion to \$15 trillion in the next 20 years, what will the country's GDP have to be in 20 years to maintain the current debt-to-GDP ratio?

$$\frac{d}{GDP} = \frac{1}{2} = \frac{\$15t}{\$30t}$$

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

US Debt to GDP ratio graph 1940-2012

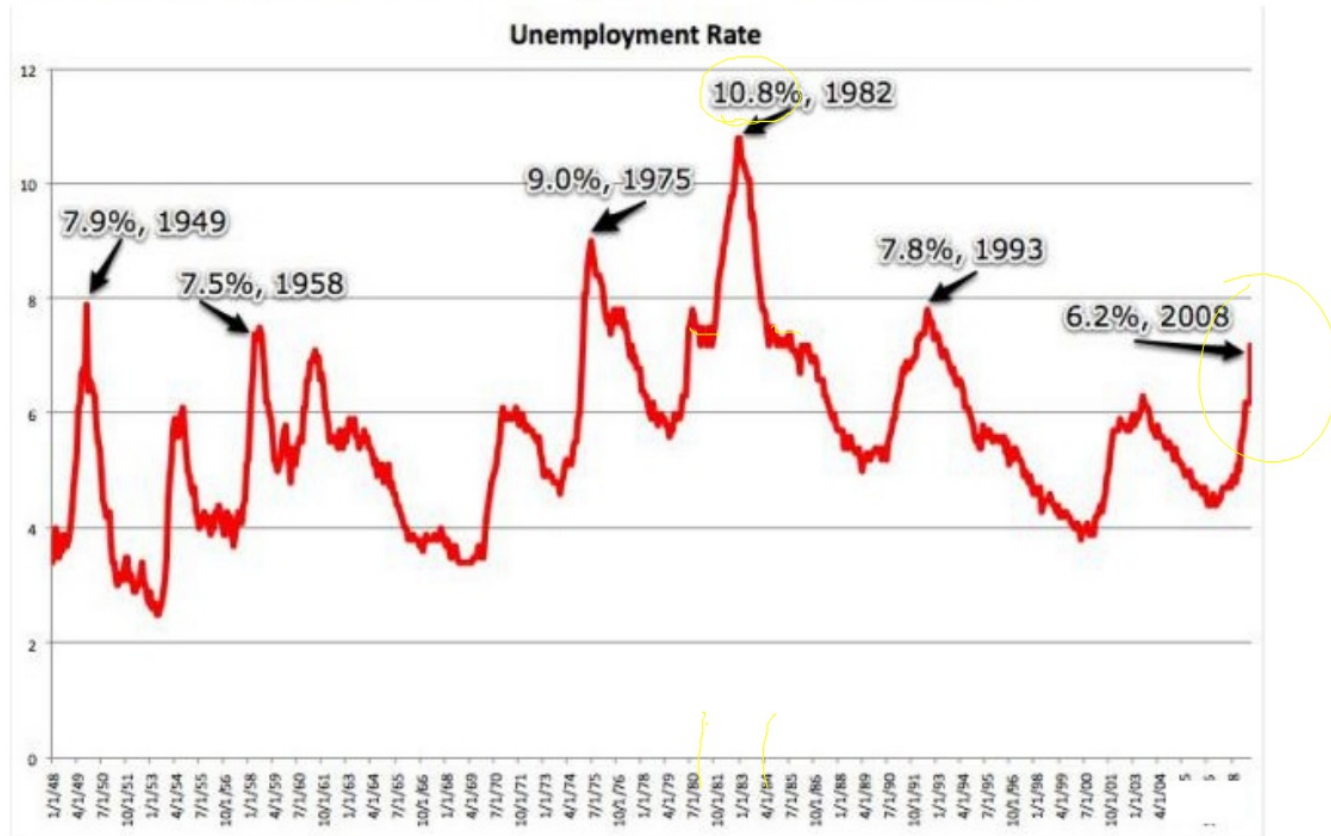


What do you notice? Are there any trends?
When was the debt ratio the lowest? The highest?
What was happening historically at that time?

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

Unemployment rate graph 1948-2008



2008 6.2%, 2009 7.8%, 2010 9.8%, 2011 9.2%

What do you notice? Are there any trends?

When was the unemployment the lowest? The highest?

What was happening historically at that time?

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

Treasury "Major Foreign Holders of Treasury Securities"

Limiting our observations to the countries from #1-17 (currently China through Mexico):

- Which country is the largest holder of US debt?
- How do they compare to the second-largest?
- How do they compare to the third largest?
- What is the general trend in debt owed to the top 17 countries?
- Are there any countries which are contrary to this trend?
- Are there any countries which stand out for large changes in the amount of debt owed to them?

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

Treasury "Major Foreign Holders of Treasury Securities"

Please note your observations and conclusions here.

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.4 National and Global Debt

WSJ article "The Legacy of Debt" Feb. 2015

- Read the article with a partner.
- Write a statement of your understanding of the article.
- Be prepared to share your understanding with another group.
- Come up with a combined group understanding statement to be shared with the class and turned in.

Partner statement:

Write a summary of what
you understand from the
article.

IWBAT discuss debt, deficit, GDP, debt ratio, and
use scientific notation to represent large numbers.

1.4 National and Global Debt

Look over the rubric as a class.

Fed Chief Says a Rate Hike in December Is Still a Possibility

Read the article & prepare to write a paragraph in which you use evidence from the article to support your conclusion as to why the Fed would raise interest rates in December.

Your paragraph is due tomorrow.

IWBAT discuss debt, deficit, GDP, debt ratio, and use scientific notation to represent large numbers.

1.5 Other Forms of Currency

04/22/16

If a country's debt-to-GDP ratio is currently 50% and its debt is expected to grow from \$10 trillion to \$15 trillion in the next 20 years, what will the country's GDP have to be in 20 years to maintain the current debt-to-GDP ratio?

$$\cancel{x} \cdot \frac{\$15t}{\cancel{x}} = 50\% \cdot x$$

$$\frac{\$15t}{50\%} = \frac{50\% \cdot x}{50\%}$$

$$\frac{\$15t}{.5} = x$$

$$\$30t = x$$

1.5 Other Forms of Currency

APK: Name other currencies known to you and the countries in which they are used.

Pesos	Mexico
Dollars	US
Euros	EU
Pounds	GB

IWBAT

- Explore the relationship between two currencies.

Via

- Capturing notes on my graphic organizer/note frame
- Whole class discussions to introduce and clarify key concepts
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1.5 Other Forms of Currency

According to the CIA World Factbook, as of 2007 there were roughly 182 different currencies, making up a grand total of \$12.35 trillion.

United States	\$1	USD
Canada	\$1	CAN
Great Britain	£1	GBP
European Union	€1	EUR
New Zealand	\$1	NZD
Australia	\$1	AUS
Switzerland	1SF	CHF
Japan yen	1¥	JPN
China yuan	1¥	CHN
Mexico	\$1	MXN

IWBAT explore the relationship between two currencies.

1.5 Other Forms of Currency

Exchange Rate

If \$1 = ¥, then \$250 = ¥.

If EUR = 1USD, then 250USD = EUR.

If MX\$1 = \$, then MX\$250 = \$.

IWBAT explore the relationship between two currencies.

1.5 Other Forms of Currency

Cost of Currency Exchange

■ Jigsaw 1-4

#1 paragraphs 1-5

#2 p. 6-11

#3 p. 12-end

- You will read and discuss your section with your group. You must justify your analysis with evidence from the section.
- You will then regroup with an expert from the other two sections and teach them your section. The two who are not presenting must come up with a question or comment using the accountable talk sentence stems from the poster.

1.5 Other Forms of Currency

Foreign Exchange market (forex)

<http://www.youtube.com/watch?v=zklAlpBnWkw>

... a global decentralized market for the trading of currencies. In terms of volume of trading, it is by far the largest market in the world. The main participants in this market are the larger international banks.

(http://en.wikipedia.org/wiki/Foreign_exchange_market)

For further explanation:

<http://www.youtube.com/watch?v=14FbmDpoTdE>

IWBAT explore the relationship between two currencies.

1.5 Other Forms of Currency

Currency Quote

€100
\$140.20



\$140.26
€100

IWBAT explore the relationship between two currencies.

1.5 Other Forms of Currency

Exchange Rate Board

1 Baht (Thailand)

$\$1 \Rightarrow \text{b } 35.03$

$\text{b } 36.10 \Rightarrow \1

Currency		Buying	Selling
		Notes	Notes
USA	USD	35.03	36.10
EURO	EUR	45.72	46.86
ENGLAND	GBP	68.96	70.90
JAPAN	JPY	0.2879	0.2971
SINGAPORE	SGD	22.89	23.59
HONG KONG	HKD	4.47	4.66
AUSTRALIA	AUD	27.08	27.97
NEW ZEALAND	NZD	24.18	25.31

IWBAT explore the relationship between two currencies.

1.5 Other Forms of Currency

Vocabulary: Appendix A.3 Key Terms

1. If $1 \text{ GBP} = 1.5628 \text{ USD}$, then how many USD can you exchange for 550 GBP?

2. If $1 \text{ GBP} = 1.5628 \text{ USD}$, then how many GBP can you exchange for 300 USD?

IWBAT explore the relationship between two currencies.

1.6 What is Money? wrap-up

04/25/16

Calculate the exchange values for two currencies.

1. If 1 GBP = 1.5628 USD, then how many USD can you exchange for 550 GBP?

$$\begin{array}{r} 550 \\ \text{GBP} \end{array} \times \begin{array}{r} 1.5628 \\ \text{USD} \\ \hline \text{GBP} \end{array} = \begin{array}{r} 859.54 \\ \text{USD} \end{array}$$

2. If 1 GBP = 1.5628 USD, then how many GBP can you exchange for 300 USD?

$$\begin{array}{r} 300 \text{ USD} \\ \hline 1.5628 \text{ USD} \\ \hline \text{GBP} \end{array} = \begin{array}{r} 191.96 \\ \text{GBP} \end{array}$$

1.6 What is Money? wrap-up

Review money uses

<http://www.youtube.com/watch?v=TBv3F6ckzcU>

Review fractional reserve banking.

<http://www.youtube.com/watch?v=qIxhsF6JLEA>

Review Foreign Exchange market (ForEx).

<http://www.youtube.com/watch?v=-qvrRRTBYAk>

1.6 What is Money? wrap-up

1.6.2 Practice problems

#1-8, 10, 12, 13, 15-20

#9

$$\text{Money multiplier} = \frac{1}{r}$$

#11

$$\$30000 * \frac{1}{7\%} = \$428571.42$$

$$\$30000 * \frac{1}{5\%} = \$600000$$

$$\$600000 - 428571.42 =$$

#14

stagnation - a prolonged period of little or no growth in the economy.